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# Psychosocial Consequences of Intensive Internet Use among Undergraduates of Universities in Ilorin Metropolis

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# PSYCHOSOCIAL CONSEQUENCES OF INTENSIVE INTERNET USE AMONG UNDERGRADUATES OF UNIVERSITIES IN ILORIN METROPOLIS

## ABSTRACT

*This study was carried out to investigate the psychosocial consequences of intensive internet use among undergraduate of universities in Ilorin metropolis, Kwara State. This study sought to determine the psychosocial consequences of intensive internet use on the basis on gender, age, level of study and marital status (University of Ilorin and AL-HIKMAH University) universities within Ilorin metropolis. A self-developed questionnaire tagged questionnaire on psychosocial consequences of intensive internet use (PCIIU) was used to collect data from the respondents for the study. Five research hypotheses were formulated and tested at 0.05 alpha level of significance, data collected were analyzed through analysis of variance (ANOVA). The study revealed that psychosocial consequences of intensive internet use are establishing using new relationship with fellow online users; incur more financial cost on internet; spending more time online than going out with others and there was significant gender difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis base on age, level, gender and marital status. Therefore, the following recommendations were made that counsellors should develop strategies to handle internet addiction among the youth and counsellor should encourage the formation of club that will promote safe and responsible internet use among students (peer counselling) and school administrators, teachers and school counsellors should work collaboratively to identify and assist students with or prone to internet addiction before it will have devastating consequences on the addicts and the society at large.*

## INTRODUCTION

### Background to the Study

The opportunities and challenges associated with using the Internet by students have come to the fore front of debate with the rapidly increased awareness and use of this technology. Academic researchers commonly use the Internet for electronic mail (e-mail) communication, electronic document transfer, or remote computer access (Jones & Madden, 2015). Similarly, the World Wide Web has emerged as a significant Internet based research tool for accessing and disseminating information. In addition to sending text-based messages, sharing files, or displaying Web pages, the Internet can broadcast audio and video content and support virtual electronic conferencing (Nimrod, 2012). The use of internet for educational purposes has increased many folds among Nigerian youths. Online access to e-journals and e-books are the emerging trends among learners (Jones & Madden, 2015).

According to Omogbemi et al (2004) internet connectivity is no longer a luxury but a necessity. Typically, in most university environments, students have access to the internet almost any time and almost anywhere on campus. Wireless connections now allow internet access from lap-top computers and other hand-held devices, within the library, the dormitory and the classroom. In spite of the benefits of the Internet for education and learning, there is a growing concern as to whether the increasing number of hours spent by students browsing the Internet

limits the amount of time and effort devoted by them to the actual reading and study of the materials obtained from or outside the Internet.

This concern is similar to the motivation for a study by Bussière and Gluszynski (2004), of the patterns and interrelationships of internet use among undergraduate students. Overtime, intensive internet especially anti- social use among undergraduate students in universities in the country has being categories among psychosocial problem. This is because there is a wide consensus on the contribution of the internet to the quality of life among individuals, students and societies, studies of the psychological problem such as psychosocial behaviour of Library and Information Science undergraduate students on information seeking behaviour by Kabir (2013), often accused internet of having a negative impact on users' psychological well-being, these studies frequently mentioned the "Intensive internet", a concept proposed by Kraut and colleagues (2015) following their study of Internet use and social involvement in 73 households during their first one to two years online (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, & Scherlis, 1998).

Based on their findings, they argued that although the Internet is often used for social interaction, it reduces social involvement and leads to social isolation and depression among heavy users. Since its introduction, the "Intensive internet" has created quite a polarized ambience. Findings regarding the adverse psychological consequences of the Internet were inconsistent, and some studies even demonstrated that the Internet had a considerable potential of contributing to expanded social networks and increasing psychological well-being (Shaw & Gant, 2002).

Study by Selfhout, Branje, Delsing, Ter Bogt, and Meeus, (2009) indicated that the impacts depended on the way people used the Internet, by demonstrating that social use (emails, chat rooms and instant messaging software) was associated with decreased depressive symptoms and anxiety, while non-social use (e.g., shopping, searching or playing games) was associated with increased symptoms and anxiety Selfhout, Branje, Delsing, Ter Bogt, and Meeus, (2009). Nonetheless, there is solid evidence for significant association between intensive Internet use and depression. Caplan (2003), for example, demonstrated that psychosocial health predicted levels of preference for online social interaction, which, in turn, predicted negative outcomes associated with psychosocial consequences of Internet use (Internet abuse and dependence). Fortson, Scotti, Chen, Malone, and Del (2007) revealed significant correlations between depression, frequent use of the Internet, and less frequent face-to-face interactions.

In addition, individuals meeting criteria for Internet intensive use endorsed more depressive symptoms, more time online, and less face-to-face interactions than did those not meeting the criteria; (Shaw & Black, 2008). Similarly, Ceyhan, and Ceyhan (2008) found that loneliness, depression, and computer self-efficacy were significant predictors of psychosocial consequences of internet use, and Bakken, Wenzel, Götestam, Johansson, and Oren (2008) showed that time spent on the Internet and prevalence of self-reported sleeping disorders, depression, and other psychological impairments increased linearly with Internet addiction scores. Existing studies also provide a sound indication for causality. For example, in a longitudinal study with adolescents, van den Eijnden, Meerkerk, Vermulst, Spijkerman, and Engels (2008) found that instant messenger use and chatting in chat rooms were positively related to compulsive Internet use, depression and loneliness in a follow-up study six months later.

One of the main explanations for the association between intensive Internet use and depression is that emotionally frail people prefer online communication over face-to-face

interaction (Caplan, 2003). In fact, it has been argued that intensive Internet use should be treated as a symptom of depression. Such use was presented as maladaptive behaviour, which put people with depression at a risk of aggravated depression as well as Internet addiction and Internet harassment (Caplan, 2003; Kim et al., 2006; van den Eijnden et al., 2008). But what happens when the Internet use of those frail individuals is intentionally directed towards coping with depression? This is where the “Intensive internet” may be challenged the most. The existing research on the “Internet intensive” tends to focus on mainstream audience, and many of the studies were conducted with students.

Moreover, even though there were exceptions Van den Eijnden et al., (2008), most studies referred to Internet use as a single activity. As the Internet offers numerous online activities, any argument regarding the association between Internet use and depression based on this approach should be considered as a potentially misleading generalization. In order to fully understand the “Intensive internet” and the various possible associations between Internet use and psychological well-being, studies should examine specific online activities, and explore diverse audiences including disadvantaged populations such as older adults, people with disabilities and ethnic minorities. As the “Intensive internet” puts great emphasis on depression, people with depression should be among the first to be examined in such further explorations. The cybernetic revolution changed the way individuals with depression look for and receive help. Their use of the Internet in coping with depression is threefold: a source of information, a medium that facilitates receiving formal care, and a resource of social support (Nimrod, 2012).

Using the Internet for social support is usually associated with online communities (online peer-to-peer support groups). Such communities can operate through diverse applications such as email lists, chat rooms, or forums/bulletin boards, but the latter seems to be the dominant technology. Compared with other immediate support alternatives (e.g., telephone hotlines) and face-to-face support groups, online communities have several advantages, including accessibility, anonymity, invisibility and status neutralization, greater individual control over the time and pace of interactions, opportunity for multi conversing, and opportunity for archival search Meier, (2004). These characteristics, along with availability, may explain why people with stigmatized illnesses, and in particular people with depression, turn to online communities for help in understanding and coping with symptoms (Lamberg, 2003).

Various studies have been carried out on consequences of internet such as anxiety on the use of internet by Meier, (2004) and peer group influence on the use of internet by (Lamberg, 2003) but not on psychosocial variables due to this, this study examines the psychosocial consequence of intensive internet use among undergraduates of universities in Ilorin metropolis.

### **Statement of the Problem**

Growing body of knowledge has accumulated relating to problems associated with excessive Internet use, such as depression, generalized and social anxieties, attention disorders, pathological personality traits and obsessive behaviors. Most students see the Internet as a somewhat magical font of wisdom. So much is "out there" that one may deceive him or herself into thinking that everything is, indeed, "out there." Of course this is not true. Moreover, search engines, the most popular means of interfacing with the vastness of the Internet, fail to uncover some forms of data. A percentage of students overuse and even abuse the Internet, such abuse include watching pornographic films and engaging in plagiarism (Nimrod, 2012)

Moreover, undergraduate students in most of universities over depend on internet, spending useful time on internet, abuse internet in many ways in the name of social life. This

study noticed the problem of intensive use of Internet (e.g., chat) could hold students captive, especially late at night, and cause them to get less sleep, and miss classes which can lead to psychosocial problem. These include watching of phonographic, committing crimes, making friends with bad gangs, devoting reading hours for charting on internet etc (Meire, 2012). Psychosocial are the instrumentalities with which students' interaction with the internet can lead to. This study seek to examine how psychosocial consequence of intensive internet use among undergraduates of universities in Ilorin metropolis are taking advantage of the resources on the Internet, determine if students abuse the use of Internet and suggest ways by which existing policy, if any, can be strengthened to reduce internet abuse.

### **Purpose of the Study**

The main purpose of this study was to examine the psychosocial consequence of intensive internet use among undergraduates of universities in Ilorin metropolis. Specific purposes of this study are to:

1. investigate students psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis
2. examine the psychosocial consequences of intensive internet use undergraduate students of universities in Ilorin metropolis based on age
3. examine gender difference in the psychosocial consequences of intensive internet use experience by undergraduate students of universities in Ilorin metropolis

### **Research Hypotheses**

The following research hypotheses are provided to guide the study

1. There is no significant gender difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis.
2. There is no significant age difference in the psychosocial consequence intensive internet use among undergraduate students of universities in Ilorin metropolis.
3. There is no significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on marital status.
4. There is no significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on level.

### **Scope of the Study**

This study covers psychosocial consequence of intensive internet use among undergraduates of universities in Ilorin metropolis. The study focused only on the undergraduate Students from University of Ilorin and Al-Hikmah University. This is because; these are the only universities in Ilorin metropolis. The study also made use of questionnaire as instrument for data collection.

### **Literature Review**

#### **Internet Use**

Internet can broadly be defined as worldwide network of computers communicating via an agreed upon protocol (rules for exchange of information). It provides access to the most

diversified source of information hosted by individuals and various organisation worlds wide on a vast network of servers. Oketunji (2001) states that internet gives us access to vast amount of resources that enhance research. The Internet serves as a forum to promote group discussion, which is time and distance independent. There are many forms this group discussion can take. These include video conferencing and chat room. Osunade and Ojo (2006) submit that, in Nigerian tertiary institutions, students use the Internet as an alternative to scarce and outdated library resources. They evaluated the behaviour of tertiary level students in the use of the Internet and library at the University of Ibadan, Nigeria. Their results indicate that the Internet is fast becoming a source of academic information among students due to easy access, correctness, availability and up-to-datedness.

Adegoke (2009) affirms that, "Indeed, the internet is also a virtual library which is seen as virtual space containing a vast amount of information and documents including books, pictures, video, graphs and musical sounds that can be consulted." Bamigboye and Agboola (2011) posit that internet has fostered a collaborative approach to learning that differs from the more solitary learning of traditional method.

### **Intensive Internet Use**

Intensive Internet usage has increased tremendously over the last few years, with continued growth expected. According to Jones and Madden (2015) one-fifth of today's college students began using computers between the ages of five and eight. By the time they were sixteen to eighteen years old all of today's current college students had begun using computers – and the Internet was a commonplace in the world in which they lived. Like any other technology, the use of the Internet has both beneficial and negative consequences. Bargees and Suhail (2006) distinguish between healthy and unhealthy Internet use, positing that excessive time spent on the Internet in purposeless activities can often take people away from their actual goals. The amount of information available on the net means that user tend to be side-tracked with a lot of unnecessary useless information (Barberio, 2004). As the Internet is not owned by any one there are no checks or censorship of information available.

The upside to this is that information is freely available to everyone without restriction but the downside to this is that information can be placed into the wrong hands. Also as there are no checks on the information on the net this may lead to inaccuracies and misleading information being published. Oji (2007) considers intensive Internet use to be one of the causes of the decline in the reading culture of Nigerian youths. She posits that, some youths are often seen in cybercafés browsing the Internet and engaging in activities that entertain rather than educate, adding that perhaps some of the ills of today's society could be attributed to wrong use of information gotten from websites.

Suhail and Bargees (2006) posit that the intensive Internet use often leads to unhealthy consequences, while heavy Internet use leaves little time for anything else. They investigated the positive and negative effects of excessive Internet use among undergraduate students in Pakistan and found positive associations between time spent on the Internet and the various dimensions of the Internet Effect Scale (IES), indicating that excessive Internet use can lead to a host of problems of educational, psychological, physical and interpersonal nature. Sahin et al (2010) found out that access to internet does not translate to effectiveness and efficiency on the part of the user. The Internet does not contain everything and, increasingly, information is walled off behind subscriptions and other barriers.

Conversely, in some instances, so much information is available that it can overwhelm student researchers. Also, the ways students use the Internet necessarily limits the type and

amount of information they will get on a subject. There is the "hidden" Internet, which is not accessed by most popular search engines. Some students find a strong temptation to use the Internet in academically questionable ways, such as the many forms of plagiarism. The convenience of Internet-based research takes a toll on traditional library-based resources, making these long-established tools underutilized by student researchers. The budgets for materials acquisition seem to get tighter every year, making it harder to expand collections while, at the same time, the slackening use of these resources under-cuts arguments for their continued expense. Sadly, students may see hard-copy and other more traditional research materials as less worthy of their attention, robbing them of excellent resources already in the collection of a campus library.

### **Psychosocial Consequences of Intensive Internet usage by undergraduate students in universities**

According to Young (2004), obsessive Internet use can be described as an addictive behavior that involves the user escape from the day-to-day struggles and unhappiness of his or her world by going online on the Internet. Meanwhile, according to Solomon (2009) defines Internet addiction as problematic or maladaptive use of the Internet that leads to social and functional impairment. This supported by Vellutini (2003) which she classified five types of Internet addiction. The first type of Internet addiction is addiction to online chatting. It can be defined as an obsessive involvement in on-line chat rooms. Often, virtual relationships take precedence over real relationships between family and friends. The second type of Internet addiction is addiction to online pornography.

It can be defined as compulsive surfing for pornography, viewing it and downloading it. The third type of Internet addiction is addiction to games. This may be described as obsessive playing of cyber games, including interactive-type games such as Counterstrike and non-interactive games like Solitaire. The fourth type of Internet addiction is addiction to money web sites. It may include compulsive online gambling, compulsive online shopping or compulsive online tracking of investments and international markets. Without restraint, people with this type of addiction can find themselves in financial ruin. The fifth type of Internet addiction is addiction to surfing the Internet. This can be described as spending too much time searching and gathering information that is available on the Internet as well as constantly following irrelevant links (Suhail & Bargees, 2006)

However, the use of Internet has been shown to have both positive and negative effects on the users especially to the students. Most of the research on the impact of Internet use shows college students being the early adopters and heavy users of the Internet as compared to the general population (Suhail and Bargees (2006), focused on problems of loneliness and heavy Internet use in college students. They classified users into three groups: Pathological users averaged 8.5 hours of Internet use per week, persons with limited symptoms averaged 3.2 hours per week, and those with no symptoms averaged 2.4 hours per week. Suhail and Bargees (2006) also added that general Internet users suggest that some people may experience psychological problems such as social isolation, depression, loneliness, and time mismanagement related to their Internet use. He also added that changes in people's use of the Internet over 12-24 months can bring changes in their social involvement and psychological well-being. According to a survey conducted by University of Minnesota Boynton Health Service in 2007, 28.7 percent of students surveyed report excessive computer/Internet/TV use and 41.8 percent indicate the

activity affected their academic performance and it suggested that that members of the public, higher education leaders and policymakers should pay attention to the findings and make the health of college students a priority.

In the meantime according to Solomon (2009), there are extreme cases where the Internet addicts may even be stealing money so they can go online at the cyber café. He added that to tackle Internet addiction, it should start at this early age and the public should be exposed to the negative effects of excessive Internet use. Few studies had been done on the relationships of Internet use and on the users' emotional states as well as social support networks which have capitulated variety findings. Shaw and Gant (2002) in Hardie and Tee (2007) found that greater Internet use was associated with a decrease in loneliness and an increase in perceived social support

## **Empirical Review**

Adekunmisi, Ajala and Iyoro (2013) investigated gender variability in the Internet use of college students. The Internet has been a field of study for researchers since its inception. The academic community especially students use the Internet to satisfy their diverse needs. The study aims to identify the gender variability in the Internet use of college students. The stratified sampling technique was employed to select students and data was collected via a questionnaire. The study confirms the existence of gender differences in the Internet use of the college students. However, the differences are slight for most uses.

In comparison, more male students are frequent users of Internet than females. Female students use the Internet more than males for information and education whereas male students use the Internet more than females for communication and entertainment. Neither male nor female students record high use the Internet sources like online libraries, databases, e-books, e-journals, wikis, and blogs. The study also finds that both male and female students face problems like information overload and information pollution while searching the Internet, though with slight variations. Finally, the problem of Internet illiteracy is found to be more common in female students than in their male counterparts.

Bimber (2000) after measuring the differences in men's and women's use of the Internet in U.S. found the existence of gender gap in their Internet use. He argued that women are substantially less likely to be frequent users, equally likely to be infrequent users, and more likely to be intermediate users. Ono and Zovodny (2003) also found women to be less frequent and less intense users of the Internet. Concern about gender inequality has now shifted from access to intensity. Mishra, Yadav and Bisht (2005) conducted a research study to learn the Internet utilization patterns of undergraduate students at the G B Pant University of Agriculture and Technology.

The findings of the study revealed that a majority of the students (85.7%) used the Internet in which male students use Internet in greater numbers than females. In short, all these studies reported that females are less intensive Internet users than males. The most pronounced gender difference in Internet use is found in the online applications used by males and female. Male college students are more likely than their female counterparts to use the Internet for recreational purposes like playing online games, visiting adult-only sites, gambling, accessing news groups and discussion forums, staying abreast of news developments, and seeking information for personal use), while females are more likely to use the Internet to talk to family and friends (Goodson, McCormick, & Evans, 2001).



These findings appear to reinforce the widespread assumption that men prefer to use the Web for information gathering and entertainment and women prefer to use the Internet for communication (Shaw & Gant, 2002). While most scholars agree that the gender gap in Internet use has narrowed significantly in the college age group (Goodson, McCormick, & Evans, 2001), some gender differences have been found in attitudes toward technology, intensity of Internet use, online applications preferred, and experience in cyberspace.

The use of internet is now popular among undergraduate students. Internet offers many benefit which includes access to information 24/7 which was not possible before; enables one to work from any location; availability and accessibility of diverse resources that one cannot find in a library; up-to-date information, fast and more convenient than the library; a good supplement to library resources, to mention a few. Many studies have found out that Internet use is beneficial to undergraduate students, among them is Hong, Ridzuan and Kuek, (2003) who found out that most students had positive attitudes towards using the internet for learning.

A study on internet access and use by undergraduate students of Nigerian University by Ani (2010) shows that internet is extensively used by undergraduate students in Nigerian University. Also, Omotayo (2006) findings show that 89.9% of the students in Obafemi Awolowo University, Ife are using the internet. Awoleye, Siyanbola and Oladipo (2008) study also shows that about 92% of undergraduate students have embraced the internet and are using it consistently Jones and Madden (2002) also found out that 79% of college students agreed that internet use had a positive impact on their college academic experience. Also, 73% said that they use the internet more than the library for information searching while only 9% use the library more than the internet.

Similarly, Kumar and Kaur (2005) conducted a study on internet and its use in the Engineering Colleges of Punjab, their findings revealed that above 70% of respondents feel that the internet is more useful, more preferred, more informative, easy to use, less expensive and time saving.

Many studies have shown that undergraduate students used internet for various purposes. For instance, Gagnon and Krovi (2000) carried out a survey of internet usage among undergraduate management science and operations management courses and found that mostly reported applications on the internet were searching the internet for information/data gathering, retrieving articles, reading and downloading information, e. t. c. Jagboro (2003) study on internet usage in Obafemi Awolowo University, the result shows that 53.42% of students used the internet for research materials and 39.71% for course material. Similarly, Kumar and Kaur study reveals that 69.4% use internet mainly for educational purposes and 34.7% use internet for entertainment purposes.

Udende and Azeez (2010) conducted a study on internet access and use among students of University of Ilorin and found that 80.8% respondents admitted that they mostly use the internet for academic purpose, 14% used for mails while 4.9% used for fun. In the same vein, Awoleye, Siyanbola and Oladipo finding reveals that 70% of students use the internet mostly for e- mail, 65% use it for information search and 20% use for on-line chatting; all of which were found to have a significant impact on their academics and social life.

Anasi (2006) study on internet use pattern of undergraduate students at the University of Lagos showed that internet use has very high impact on the academic/career related activities of the students Studies have also shown the hour spent on the internet by undergraduate students. For example, Korgen, Odell and Schumacher (2001) study show connection between study habits and internet use. Students who dedicated more hours per week studying are also logging

more hours on-line than those who devote less time to their academic work. For instance, those who study for 25 hours per week have the highest mean score of internet hour of 11.29 while those who studies for 5 hours per week have internet hour mean score of 4.85. Tella (2007) findings revealed that majority of the respondents used internet between 1-5 hours per week. Awolaye, Siyanbola and Oladipo study also shows that students used an average of 3-5 hours per week on the internet. On internet experience, Bankole and Babalola (2012) found out that 34.8% of undergraduate students have been using the internet from 5 -6 years.

Similarly, Fasae and Aladeniyi (2012) also reported that 65% had more than 3 year's internet experience while in Awolaye, Siyanbola and Oladipo study shows that students have about 4 years internet usage experience. Constraints to use of internet have also been identified in many studies. Irregular power supply, high cost of internet access, lack of time, slow access speed and delay in screen loading, etc has been a major constraint. For example, Bankole and Babalola finding shows slowness of the server as the major constraint, Fasae and Aladeniyi found slow access speed with 96% respondent. Kumar and Kaur also found that delay in retrieving relevant information is the major problems faced by 69.4% of the respondents.

## **Methodology**

This research study used a descriptive survey research design. In using this design, data collection was carried out in a structured process. The population for this study consists of University of Ilorin students and Al-Hikmah University students this was because; these are the only universities in Ilorin metropolis. According to the Student Affair Units of the two universities, the students' population of University of Ilorin is 38,470 and that of Al-Hikmah is 2430. Therefore, the study population for this study is 40,900. The study adopted proportional sample to select sample size for the study with use of 1% of total population for the study.

Therefore, simple random sampling technique was used. 1% of 40,900 is 420. Therefore, the population for this study is 420. For the purpose of data collection, the researcher will design questionnaire for the study. The questionnaire was divided into two sections (A and B). Section A is meant to elicit personal information on the general background of the students and information will consist of gender, marital status, age and level of students Section B would be based on the research questions. This was to confirm the psychosocial consequences of intensive internet use among undergraduate of universities in Ilorin. The questionnaire consists of 30 items. Fifteen (15) items centred on internet intensive use measure and the other fifteen (15) items on psychosocial consequences of intensive internet use.

A modified four-point Likert scale format was used to measure the internet intensive use in the following order ATM- Always true of me, STM- sometimes true of me, RTM-rarely true of me, NTM- never true of me. A modified four-point Likert scale format will be used to psychosocial consequences in the following order A- always, S- sometimes, R- rarely and N-never. All the items will be positively structured. Analyzed data was presented in form of percentages and the statistical instruments used to test the formulated hypotheses using Chi square at 0.05 Level of Significance

## **RESULTS**

This chapter presents the analysis of the data gathered for the study. Data analysis was done on a total of 420 copies of the questionnaires but only 411 copies were properly filled and accounted for and therefore used for this study. The data collected were analyzed using both descriptive and inferential statistics. For the demographic data, percentage was employed, mean

ranked order was used for research question, while t-test and Analysis of Variance (ANOVA) statistical tools were adopted to analyze the hypotheses at 0.05 level of significance.

### Demographic Data

This section presents the results of data obtained on the respondents in frequency counts and percentages.

**Table 1:** Percentage Distribution of Respondents Based on Gender

Gender	Frequency	Percentage
Male	210	51.1
Female	201	48.9
<b>Total</b>	<b>411</b>	<b>100</b>

Table 1 shows the distribution of respondents by gender. The table shows that 51.1% (210) of the respondents were male while 48.9% (201) of the respondents were female. This indicates that male participated more than female in the study.

**Table 2:** Percentage Distribution of respondents based on Age

Age	Frequency	Percentage
16-22 years	189	46.0
23-27 years	201	48.9
28-32 years	0	0.0
33 years and above	21	5.1
<b>Total</b>	<b>411</b>	<b>100</b>

Table 2 shows that 46.0% (189) of the respondents were between ages of 16-22 years, 48.9% (201) of the respondents were between 23-27 years old, none of the respondents fell between the ages of 28-32 years while 5.1% (21) of the respondents were 33 years and above. This indicates that respondents who were between the ages 23-27 years participated more in the study.

**Table 3: Percentage Distribution of Respondents Based on Marital Status**

Status	Frequency	Percentage
Single	336	81.8
Married	75	18.2
<b>Total</b>	<b>411</b>	<b>100</b>

Table 3 shows the distribution of respondents' marital status. The table reveals that 81.8% (336) of the respondents were singled while 18.2% (75) of the respondents were married. This also indicates that respondents who were singled participated more in the study.

**Table 4: Percentage Distribution of Respondents Based on Level**

Level	Frequency	Percentage
100	18	4.4
200	32	7.8
300	55	13.4
400	306	74.5
<b>Total</b>	<b>200</b>	<b>100</b>

Table 4 shows that 4.4% (18) of the respondents were in 100 level, 7.8% (32) of the respondents were 200 level, 13.4% (55) of the respondents were in 300 level while 74.5% (306) of the respondents were in 400 level. This implies that respondents who were in 400 level participated more in this study.

**Research Question 1:** What are the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin?

**Table 5: Mean and Rank Order on the Respondents' view on the Psychosocial Consequences of Intensive Internet Use among Undergraduates in Ilorin**

Item No.	Psychosocial consequences	Mean	Rank
2	I do establish new relationship with fellow online users	2.72	1 <sup>st</sup>
11	I incur more financial cost on internet	2.36	2 <sup>nd</sup>
12	I prefer spending more time online than going out with others	2.35	3 <sup>rd</sup>
3	My parents/finance do complain that I spend too much time	2.27	4 <sup>th</sup>

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	online		
15	I feel tensed when offline but this disappear when I am back online	2.25	5 <sup>th</sup>
4	I can't do without checking my email before anything	2.21	6 <sup>th</sup>
8	I do have the fear that life without the internet would be boring	2.06	7 <sup>th</sup>
13	I do feel saddened when off line but this disappears when I am back online	2.03	8 <sup>th</sup>
5	browsing/chatting makes me too secretive	2.02	8 <sup>th</sup>
9	I do not take it easy with anyone that disturbs me while I am online	2.01	10 <sup>th</sup>
14	I feel irritable when offline but become stable when back online	2.01	11 <sup>th</sup>
16	I experience concentration problem in class due to loss of sleep	1.90	12 <sup>th</sup>
1	I prefer the pleasure of the internet than the intimacy of any partner	1.88	12 <sup>th</sup>
20	I lack the social skill to relate well with life situation due to interaction with online friends	1.86	14 <sup>th</sup>
10	I get disturbed when am off line	1.83	15 <sup>th</sup>
18	I lack ability to coordinate my daily activities due to loss of sleep attributed to late night browsing/chatting	1.75	16 <sup>th</sup>
6	thinking about the internet disturbs my daily activities	1.69	17 <sup>th</sup>
7	I get nervous about going online again	1.67	17 <sup>th</sup>
19	I am being worried with the set back I am having in my grade due to the excessive time spent online	1.50	19 <sup>th</sup>
17	I do have relationship constraint with my parent due to the neglect of house chore caused by excessive time spent on internet	1.41	20 <sup>th</sup>

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Table 5 presents the mean and rank order of respondents' view on psychosocial consequences of intensive internet use among universities undergraduate in Ilorin. The table indicates that item 2 which states that "I do establish new relationship with fellow online users" ranked 1st with a mean score of 2.75. Item 11 which states that "I incur more financial cost on internet" ranked 2nd with a mean score of 2.36. Ranked 3rd is item 12 with a mean score of 2.35 and states that "I prefer spending more time online than going out with others". On the other

hands, item 7 which states that “I get nervous about going online again” ranked 18th with a mean score of 1.67. Item 19 which states that “I am being worried with the set back I am having in my grade due to the excessive time spent online” ranked 19th with a mean score of 1.50, while item 17 which states that “I do have relationship constraint with my parent due to the neglect of house chore caused by excessive time spent on internet” ranked 20th with a mean score of 1.41. Since nineteen items have mean scores that are below the mid-cut off point of 2.50, then it can be said that intensive internet use does not has psychosocial consequences among undergraduate students of universities in Ilorin.

### Hypotheses Testing

Four null hypotheses were postulated and tested for this study. The hypotheses were tested using t-test and ANOVA statistical methods at 0.05 level of significance.

**Hypothesis One:** *There is no significant gender difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis*

**Table 6:** Mean, Standard Deviation and t-value on the Respondents’ view on the Psychosocial Consequences of Intensive Internet Use Based on Gender

Gender	N	Mean	SD	df	Cal. value	t- Crit. value	t- P-value
Male	210	37.22	9.15	409	4.98*	1.96	.000
Female	201	42.47	12.02				

\*  $p < 0.05$

Table 6 shows that the calculated t-value of 4.98 is greater than the critical t-value of 1.96 with corresponding p-value of .000 which is less than 0.05 alpha level of significance. Since the calculated t-value is greater than the critical t-value, the hypothesis which states that there is no significant gender difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis is therefore rejected.

**Hypothesis Two:** *There is no significant age difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis*

**Table 7:** Analysis of Variance (ANOVA) showing the Respondents' view on the Psychosocial Consequences of Intensive Internet Use Based on Age

Source	df	SS	Mean Square	Cal. F-ratio	Crit. F-ratio	P-value
Between Groups	2	4676.605	2338.303	21.40*	3.00	.000
Within Groups	408	44575.979	109.255			
Total	410	49252.584				

\*  $p < 0.05$

Table 7 shows that calculated F-ratio of 21.40 is greater than the critical F-ratio of 3.00 with a corresponding p-value of .000 which is less than 0.05 alpha level of significance. Since the calculated F-ratio is greater than the critical F-ratio, the null hypothesis is therefore rejected; hence there is significant age difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis. In order to determine the mean value(s) that caused the significant difference observed in the ANOVA results of Table 7, the Duncan Multiple Range Test

(DMRT) was used as a post-hoc test. The results of the DMRT procedure are displayed in Table 8.

**Table 8:** Duncan's Multiple Range Test (DMRT) showing Differences in the Respondents' view on the Psychosocial Consequences of Intensive Internet Use Based on Age

Duncan Groupings	N	Means	Group	Age
A	189	42.03	1	16-22 years
B	201	39.05	2	23-27 years
C	21	26.67	3	33 years and above

Table 8 shows the Duncan Multiple Range Test indicating the significant difference noted in the ANOVA on Table 7. Group 1 (16-22 years) with a mean score of 42.03 significantly differed from Group 2 with the mean score of 39.05 but also significantly differed from Group 3 with a mean score of 26.67. All the groups are differed from one another but the significant difference noted was as a result of Group 1. Hence the significant difference noted in the ANOVA on table 8 was a result of respondents who were between the ages of 16-22 years old thus, the hypothesis is rejected.

**Hypothesis Three:** *There is no significance difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on marital status*

**Table 9:** Mean, Standard Deviation and t-value on the Respondents' view on the Psychosocial Consequences of Intensive Internet Use Based on Marital Status

Status	N	Mean	SD	df	Cal. value	t- value	Crit. value	P-value
Single	336	40.58	10.94	409	3.12*	1.96		.002
Married	75	36.25	10.37					

\*p < 0.05

Table 9 shows that the calculated t-value of 3.12 is greater than the critical t-value of 1.96 with corresponding p-value of .002 which is less than 0.05 alpha level of significance. Since the calculated t-value is greater than the critical t-value, the null hypothesis is rejected. Hence, there is no significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on marital status.

**Hypothesis Four:** *There is no significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on level*

**Table 10:** Analysis of Variance (ANOVA) showing the Respondents' view on the Psychosocial Consequences of Intensive Internet Use Based on Level

Source	df	SS	Mean Square	Cal. F-ratio	Crit. F-ratio	P-value
Between Groups	3	14315.087	4771.696	1.91	2.60	.201
Within Groups	407	34937.497	2485.842			
Total	410	49252.584				

Table 10 shows that calculated F-ratio of 1.91 is less than the critical F-ratio of 2.60 with a corresponding p-value of .201 which is greater at 0.05 alpha level of significance. The null hypothesis is accepted since the calculated F-ratio is less than critical F-ratio, hence there is no significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on level.

### Summary of the Findings

The summary of the results were as follows:

1. The study revealed that psychosocial consequences of intensive internet use are establishing new relationship with fellow online users; incur more financial cost on internet; spending more time online than going out with others; parents/finance do



complain that I spend too much time online; tensed when offline but this disappear when I am back online among others.

2. There was significant gender difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis.
3. There was significant age difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis.
4. There was significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on marital status.
5. There was no significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on level.

### **Discussion of Findings**

The finding revealed that psychosocial consequences of intensive internet use are establishing new relationship with fellow online users; incur more financial cost on internet; and spending more time online than going out with others. The finding of the study supports the submission of Hardie and Tee (2007) found that greater internet use was associated with a decrease in loneliness and an increase communication and relationship with peers and family. Stafford (2005) identified virtual relationships as one of the importance of internet use among internet users. The finding is in line with the study of Awolaye, Siyanbola and Oladipo (2008) study who stressed that consequence of internet usage are high cost of internet access, lack of time, social and functional impairment etc. The finding of the study also in line with the submission of Tella (2007), it was revealed that majority of the undergraduates used internet between 1-5 hours per week. Similarly, Fasae and Aladeniyi (2012) study also shows that students used an average of 3-5 hours per week on the internet. On internet experience, Bankole and Babalola (2012) found out that 34.8% of undergraduate students have been using the internet from 5 -6 years

Hypothesis one revealed that there was significant gender difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis. This implies that the gender difference among the respondents have significant difference on the psychosocial consequences of intensive internet use. This might be due to the fact that male and female undergraduates use internet for different purpose, hence have different difference psychosocial consequences. This finding support the Adekunmisi, Ajala and Iyoro (2013) who found that there was existence of gender differences in the internet use of the college students. It was stressed further that female students use the Internet more than males for information and education whereas male students use the Internet more than females for communication and entertainment while both are faced with different consequences.

Hypothesis two revealed that there was significant age difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis. This implies that respondents were difference in their responses based on age. DMRT results showed that respondents between the ages of 16-22 years contributed to the significant difference. This may be due to the fact that the younger undergraduates are so

obsessed with internet. This finding support the finding of Jones and Madden (2015) who stated that one-fifth of today's college students began using computers between the ages of 13 and 18 are addicted to internet, thus faced with the consequences such as poor academic performance, poor study habits among others.

Hypothesis three also revealed that there was significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on marital status. This means that respondents were different in their expression on the psychosocial consequences of internet intensive use based on marital status. This might be due to the fact that youths who are yet to be married use internet more than married undergraduates. This submission is in line with Evmorfia, Polyxeni and Eirini (2014) who found that there were significant differences between the means of psychiatric symptoms in among internet addicted and non-addicted based on marital status.

Hypothesis four revealed that there was no significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on level. This implies that respondents were not different in their responses based on class level. The finding support the finding of Rajput, Muhammad, Shabbir and Ahmed (2016) who found that effect of internet addiction on academic performance of medical students based on academic level.

## **Conclusion**

This research work examined the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis. The study revealed that psychosocial consequences of intensive internet use are establishing new relationship with fellow online users; incur more financial cost on internet; spending more time online than going out with others; parents/finance do complain that I spend too much time online; tensed when offline but this disappear when I am back online among others.

1. There was significant gender difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis.
2. There was significant age difference in the psychosocial consequences of intensive internet use among undergraduate students of universities in Ilorin metropolis.
3. There was significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on marital status.
4. There was no significant difference in the psychosocial consequence of intensive internet use among undergraduate students of universities in Ilorin metropolis based on level.

## **Recommendations**

Based on the findings of this study, it is recommended that:

1. People should develop strategies to handle internet addiction among the youth.

2. There should be encouragement to formulate club that will promote safe and responsible internet use among students (peer counselling).
3. School administrators, teachers and school counsellors should work collaboratively to identify and assist students with or prone to internet addiction before it will have devastating consequences on the addicts and the society at large.

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